

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method for identifying a compound that modulates T lymphocyte activation, the method comprising the steps of:
 - (i) contacting the compound with a TRAC1 polypeptide ~~or a fragment thereof~~, wherein the polypeptide comprises an amino acid sequence having at least about 90% identity to ~~or fragment thereof encoded by a nucleic acid that hybridizes under stringent conditions to an antisense nucleic acid corresponding to a nucleic acid encoding a polypeptide having an~~ amino acid sequence of SEQ ID NO:1; and
 - (ii) determining the functional effect of the compound upon the TRAC1 polypeptide.
2. (Original) The method of claim 1, wherein the functional effect is measured *in vitro*.
3. (Original) The method of claim 2, wherein the functional effect is a physical effect.
4. (Currently amended) The method of claim 2, wherein the functional effect is a chemical or phenotypic effect.
5. (Currently amended) The method of claim 4, wherein the chemical or phenotypic functional effect of the compound on the TRAC1 polypeptide is determined by measuring ligase activity of the TRAC1 polypeptide.
6. (Original) The method of claim 1, wherein the polypeptide is expressed in a host cell.

7. (Currently Amended) The method of claim 6, wherein the functional effect of the compound on the TRAC1 polypeptide is a physical effect.

8. (Currently Amended) The method of claim 6, wherein the functional effect of the compound on the TRAC1 polypeptide is a chemical or phenotypic effect.

9. (Original) The method of claim 6, wherein the host cell is primary T lymphocyte.

10. (Original) The method of claim 6, wherein the host cell is a cultured T cell.

11. (Original) The method of claim 10, wherein the host cell is a Jurkat cell.

12. (Currently amended) The method of claim 8 [[6]], wherein the chemical or phenotypic effect is determined by measuring CD69 expression, intracellular Ca²⁺ mobilization, Ca²⁺ influx, ligase activity, or lymphocyte proliferation.

13. (Original) The method of claim 1, wherein modulation is inhibition of T lymphocyte activation.

14. (Original) The method of claim 1, wherein the polypeptide is recombinant.

15. (Original) The method of claim 1, wherein the TRAC1 polypeptide comprises an amino acid sequence of SEQ ID NO:1.

16. (Original) The method of claim 1, wherein the TRAC1 polypeptide is encoded by a nucleic acid comprising a nucleotide sequence of SEQ ID NO:2.

17. (Withdrawn) The method of claim 1, wherein the compound is an antibody.

18. (Withdrawn) The method of claim 1, wherein the compound is an antisense molecule.

19. (Original) The method of claim 1, wherein the compound is a small organic molecule.

20. (Withdrawn) The method of claim 1, wherein the compound is a peptide

21. (Withdrawn) The method of claim 20, wherein the peptide is circular.

22. (Withdrawn) A method for identifying a compound that modulates T lymphocyte activation, the method comprising the steps of:

(i) contacting a T cell comprising a TRAC1 polypeptide or fragment thereof with the compound, the TRAC1 polypeptide or fragment thereof encoded by a nucleic acid that hybridizes under stringent conditions to an antisense nucleic acid corresponding to a nucleic acid encoding a polypeptide having an amino acid sequence of SEQ ID NO:1; and

(ii) determining the chemical or phenotypic effect of the compound upon the cell comprising the TRAC1 polypeptide or fragment thereof, thereby identifying a compound that modulates T lymphocyte activation.

23. (Withdrawn) A method for identifying a compound that modulates T lymphocyte activation, the method comprising the steps of:

(i) contacting the compound with a TRAC1 polypeptide or a fragment thereof, the TRAC1 polypeptide or fragment thereof encoded by a nucleic acid that hybridizes under stringent conditions to an antisense nucleic acid corresponding to a nucleic acid encoding a polypeptide having an amino acid sequence of SEQ ID NO:1;

(ii) determining the physical effect of the compound upon the TRAC1 polypeptide; and

(iii) determining the chemical or phenotypic effect of the compound upon a cell comprising the TRAC1 polypeptide or fragment thereof, thereby identifying a compound that modulates T lymphocyte activation.

24. (Withdrawn) A method for identifying a compound capable of interfering with binding of an TRAC1 polypeptide or fragment thereof, the method comprising the steps of:

(i) combining an TRAC1 polypeptide or fragment thereof with an E2 ubiquitin-conjugating enzyme polypeptide and the compound, wherein the TRAC1 polypeptide or fragment thereof is encoded by a nucleic acid that hybridizes under stringent conditions to a nucleic acid encoding a polypeptide having an amino acid sequence of SEQ ID NO:1; and

(ii) determining the binding of the TRAC1 polypeptide or fragment thereof to the E2 ubiquitin-conjugating enzyme polypeptide.

25. (Withdrawn) The method of claim 24, wherein the TRAC1 polypeptide or fragment thereof has ligase activity.

26. (Withdrawn) The method of claim 24, wherein the E2 ubiquitin-conjugating enzyme polypeptide is selected from the group consisting of Ubc5, Ubc7, and Ubc8.

27. (Withdrawn) The method of claim 24, wherein the TRAC1 polypeptide or fragment thereof and the E2 ubiquitin-conjugating enzyme polypeptide are combined first.

28. (Withdrawn) The method of claim 24, wherein the reaction is performed in vitro.

29. (Withdrawn) The method of claim 24, wherein the TRAC1 polypeptide or fragment thereof and the E2 ubiquitin-conjugating enzyme polypeptide are expressed in a cell.

30. (Withdrawn) The method of claim 29, wherein the cell is a yeast cell.

31. (Withdrawn) The method of claim 30, wherein the TRAC1 polypeptide or fragment thereof is fused to a heterologous polypeptide.

32. (Withdrawn) The method of claim 24, wherein the binding of the TRAC1 polypeptide or fragment thereof to the E2 ubiquitin-conjugating enzyme polypeptide is determined by measuring reporter gene expression.

33. (Withdrawn) An isolated complex comprising a TRAC1 polypeptide or fragment thereof bound to an E2 ubiquitin-conjugating enzyme polypeptide, wherein the TRAC1 polypeptide or fragment thereof is encoded by a nucleic acid that hybridizes under stringent conditions to a nucleic acid encoding a polypeptide having an amino acid sequence of SEQ ID NO:1.

34. (Withdrawn) The complex of claim 33, wherein the E2 ubiquitin-conjugating enzyme polypeptide is selected from the group consisting of Ubc5, Ubc7, and Ubc8.

35. (Withdrawn) A method of modulating T lymphocyte activation in a subject, the method comprising the step of administering to the subject a therapeutically effective amount of a compound identified using the method of claim 1.

36. (Withdrawn) The method of claim 35, wherein the subject is a human.

37. (Withdrawn) The method of claim 35, wherein the compound is an antibody.

38. (Withdrawn) The method of claim 35, wherein the compound is an antisense molecule.

39. (Withdrawn) The method of claim 35, wherein the compound is a small organic molecule.

40. (Withdrawn) The method of claim 35, wherein the compound is a peptide.

41. (Withdrawn) The method of claim 40, wherein the peptide is circular.

42. (Withdrawn) The method of claim 35, wherein the compound inhibits T lymphocyte activation.

43. (Withdrawn) A method of modulating T lymphocyte activation in a subject, the method comprising the step of administering to the subject a therapeutically effective

amount of a TRAC1 polypeptide, the polypeptide encoded by a nucleic acid that hybridizes under stringent conditions to a nucleic acid encoding a polypeptide having an amino acid sequence of SEQ ID NO:1.

44. (Withdrawn) The method of claim 43, wherein the TRAC1 polypeptide comprises an amino acid sequence of SEQ ID NO:1.

45. (Withdrawn) A method of modulating T lymphocyte activation in a subject, the method comprising the step of administering to the subject a therapeutically effective amount of a nucleic acid encoding a TRAC1 polypeptide, wherein the nucleic acid hybridizes under stringent conditions to a nucleic acid encoding a polypeptide having an amino acid sequence of SEQ ID NO:1.

46. (Withdrawn) The method of claim 45, wherein the TRAC1 nucleic acid comprises a nucleotide sequence of SEQ ID NO:2.

47. (New) The method of claim 1, wherein the TRAC1 polypeptide comprises an amino acid sequence having at least about 95% identity to an amino acid sequence of SEQ ID NO:1.